

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



INTERNATIONAL PUBLICATION NUMBER

(43) International Publication Date
24 January 2002 (24.01.2002)

PCT

(10) International Publication Number
WO 02/05746 A3

- (51) International Patent Classification?: C07C 69/88
(21) International Application Number: PCT/IB01/01252
(22) International Filing Date: 13 July 2001 (13.07.2001)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
662/MUM/2000 14 July 2000 (14.07.2000) IN
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(81) Designated States (national): CA. MX. US.
(84) Designated States (regional): European patent (AT. BE. CH. CY. DE. DK. ES. FI. FR. GB. GR. IE. IT. LU. MC. NL. PT. SE. TR).

Published:
— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
(88) Date of publication of the international search report:
2 May 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: THE PROCESS OF MANUFACTURING PHARMACEUTICAL GRADE TANNATES

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(57) Abstract: Antihistamines are available in the form of free bases as well as salts i.e. hydrochloride, maleate, tannate etc. Frequently, it is necessary to utilise antihistamines in the form of tannate salt because such salts are generally quite stable and may be administered in such form without untoward side effects. Tannic acid, also known as tannin, is a well known naturally occurring substance. Tannic acid, which is available commercially, usually contain about 5 % of water, has a molecular weight of about 1700 and is typically produced from Turkish or Chinese nutgall. Antihistamine tannates, presently manufactured commercially, are relatively impure. Such tannates are prepared by the reaction of antihistamine free base with tannic acid and using a volatile solvent, isopropanol (IPA). The yield is only fair (around 70 %) and decomposition products e.g. 2-5 % along with significant amount of volatile solvent, isopropanol (6-10 %) remains with the product, which cannot be removed. According to present invention, for specific types of tannates, isopropanol (IPA) is removed by adding water while stirring and dispersing the wet cake of tannate. It is then filtered and the tannate residue is dried to obtain pharmaceutical grade tannate. Tannates like chlorpheniramine tannate and pyrilamine tannates have been prepared by this method.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB01/01252

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C 07 C 69/88
 US CL : 560/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 560/68

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used).
 STN: REGISTRY AND CAPLUS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 3,282,789 A. (MARTY et al) 1 November 1966 (01.11.1966), whole document	1-10
Y	US 5,663,415 A. (CHOPDEKAR et al) 2 September 1997 (02.09.1997), columns 2-3, examples	1-10

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See patent family annex.

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Date of the actual completion of the international search

06 February 2002 (05.02.2002)

Date of mailing of the international search report

13 MAR 2002

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